Consensus on daylight photodynamic therapy (dl-PDT) in Switzerland

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- Chronischer Juckreiz
- HPV Impfstoff als Behandlung
- Konsens dl-PDT

- Prurit chronique
- Vaccin HPV comme traitement
- Consensus dl-PDT

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SOMMAIRE

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Consensus on daylight photodynamic therapy (dl-PDT) in Switzerland

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Daylight photodynamic therapy (dl-PDT) represents a novel and interesting technique for the efficient and painless treatment of field carcinogenesis. As there has been many questions regarding country-specific aspects that may impact on its practice, such as latitude and weather conditions, a group of specialists have gathered to write a position consensus on its use in Switzerland. It is based on the Journal of the European Academy of Dermatology and Venereology consensus from C.A. Morton et al. *Practical approach to the use of daylight photodynamic therapy with topical methyl aminolevulinate for actinic keratosis* JEADV 2015, but specifically addresses issues pertinent to our climate and health system. It's aim is to provide a simple practical guide for all practicing dermatology in Switzerland.

1. Key messages for daylight photodynamic therapy (dl-PDT)

- Methyl amino-levulinate (MAL) dl-PDT treatment is not inferior to conventional photodynamic therapy (cPDT) in several studies1-7
- dl-PDT is better tolerated than cPDT1-5
- Evidence regard the treatment of grade I and II AK of the face & scalp1-5
- dl-PDT is a first-line treatment options for patient with AK grade I and II
- dl-PDT is a first line therapy in field cancerisation
- dl-PDT is a single-day treatment
- dl-PDT allows for the treatment of large fields

2. Who to treat?

- According to the summary of product characteristics from Swissmedic (SmPC) MAL-PDT is indicated for the treatment of thin, non-hyperkeratotic actinic keratosis if other therapies are seen as inappropriate
- According to our panel of experts, dl-PDT may be a first-line treatment of patients suffering from actinic keratosis (AK) level I and II
- dl-PDT is also indicated for the treatment of AK level I in immunosuppressed patients (8)
- There is evidence for a partial treatment of AK grade III reported in area of AK I and II (reduction of AK III to AK II)

3. Weather conditions?

- Aim a daylight exposure for 2 hours (range 1.5 – 2.5 hours)
- Sunny and shady places outside, direct sun irradiation is not mandatory
- dl-PDT is best used between 9:00 – 16:00 hours, with a guarantee of a mean irradiance (light intensity): 267 W/m2 (44-601 W/m2) and optimal light intensity : >130W/m2.
- Temperatures from 10 – 30 C°
- If patient feels too hot in direct sun light, the patient may relocate to the shade best at 25°C ambient temperature or above
- In rain and snow, dl-PDT treatment should not be performed
- In Summary, avoid any conditions in which the patient cannot stay comfortably outside for 2 hours.

4. Recommended steps/consultations for dl-PDT

4.1. Details on the pre-treatment for dl-PDT

- Keratolysis cn be performed 1 to 6 days in advance.
- For keratolysis, urea 10 – 40%, or 5-10% salicylic acid, or mixes thereof (Excipial/Kerasal) are all fine
- Application of sun screen SPF≥ 20. Use only sun screen with chemical filters
- Sun screen should be applied at least 15 min. before lesion preparation.

Do not use sun screen with physical filters such as zinc oxide, titanium dioxide or iron oxide, as these will absorb the visible light spectrum that activates proto-porphyrin IX and is essential for dl-PDT

4.2. Lesion preparation

- Remove crusts and roughen skin surface by one of the means below
  - o Curettage. Skin should not bleed
  - o Fractional laser: 10mJ/pulse, single pulse, 5% density
  - o Microdermabrasion
  - o Sandpaper ablation. Skin should not bleed (9)
  - o Not recommended: tape stripping

4.3. Application of MAL 16% cream

- Thin layer of MAL 16% cream 2g on whole field treated area up to two full hand sized areas of

Report

the patient for one session on the scalp or face. Exceed this treatment area only with caution

4.4. Daylight exposure

- No later than 30 min after MAL 16% cream application
- 1.5 – 2.5 hours (target 2h) exposure in sunny and shady places outside

4.5. Follow-Up

- A) The patient did the treatment alone: the patient should remove remaining MAL 16% cream by himself after 1.5 – 2.5 hours irradiation. A consultation by the physician after treatment is not mandatory. Patient should be advised to contact the physician in case of uncertainty or adverse events occurring after treatment
- B) If the treatment was done in the physician's office: MAL 16% cream will be removed in the physician's practice
- Follow-up visit at 3 months for evaluation of efficacy and safety should be scheduled

Procedure	Description	Consultation	Day
Diagnosis	Identification of treatment area(s) for AK I/II	1st cons.	Baseline
Instruction of the patient	Explain the disease complex of actinic keratosis Illustrate dl-PDT treatment Explain the difference between daylight and UV irradiation (sunlight) Instruction for keratolysis using topical urea or salicylic acid or mix Instruction for sun protection cream application SPF≥ 20 at least 15 minutes before treatment starts	1st cons.	Baseline
Pre-treatment for **dl-PDT**	keratolysis using urea or salicylic acid	Self-application by patient	1-6
Protection from UVA/UVB	Sun screen SPF≥ 20 application Use chemical filters only, no physical filters, at least 15 min before MAL application	Self-application by patient	7
Field lesion preparation for **dl-PDT**	Remove crusts and roughen skin surface by one of the following: Curettage Fractional laser: 10mJ/pulse, single pulse, 5% density Microdermabrasion Sandpaper abrasion	2nd cons.	7
Patient instruction	Discuss checklist of to-do items Give instruction on the duration of the daylight treatment, the possibility to move and to relocate to shady areas if the sun is to hot	2nd cons.	7
Application of MAL 16% cream	Apply a thin layer of MAL 16% cream 2g on whole field treated area up to two full hand sized areas of the patient for one session on the scalp or face. Exceed this treatment area only with caution	2nd cons.	7
Daylight exposure	1.5 – 2.5 hours (target 2 hours) outside for patients Sunny and shady places outside Ambient temperature 10 – 30 C° After exposure, the patient or an assistant should wash off the remaining MAL-cream After exposure the patient should avoid sun-light	2nd cons.	7
Post-treatment Consultation	If the patient performed the dl-PDT treatment outside of the physician's practice area, a follow-up visit right after the treatment should be performed	3rd cons. (2 by patient)	7
Follow-Up	Evaluation of the efficacy of treatment and adverse events	4th cons. (3 by patient)	60

5. Literature

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Report

Venerologie

Das lateinische Ursprungswort ist:

Venus = lateinisch: Göttin der Liebe,
griechisch: Aphrodite

Die griechische Ursprungswort ist:

κύπριο = kypris = Cypris, Kypris andere (myzenische) Bezeichnung dieser Göttin

Venus die Göttin der Liebe ist für die Bezeichnung der Venerologie der Krankheiten die hauptsächlich durch Geschlechtsverkehr erworben werden herangezogen worden. Für dieselbe Bezeichnung ausgehend von dem griechischen Namen für diese Gottheit, der sich aber nicht auf Aphrodite bezieht sondern auf Cypris/Kypris was dann Crypidologie ergibt. Dieses Wort ist nicht mehr in Verwendung aber der gleiche Ursprung ergibt das Wort Crypidophobie und damit meint man die Furcht vor venerischen Erkrankungen oder Furcht vor Geschlechtsverkehr mit Prostituierten.

Vénérologie

Le nom latin d'origine est:

Venus = latin: déesse de l'amour
grecque: Aphrodite

Le mot grec d'origine est:

κύπριο = kypris = Cypris, Kypris autre nom mycénique de cette déesse

Venus, déesse de l'amour, a été choisie pour la dénomination de la vénérologie qui rassemble les maladies transmises principalement sexuellement. La dénomination à partir du nom grec de la déesse de l'amour n'est pas liée à Aphrodite mais à Cypris, un autre nom pour cette déesse, ce qui en résulte la cypridologie. Cette dénomination n'est cependant plus utilisée mais on retrouve la même origine dans le terme cypridophobie décrivant la crainte morbide des maladies vénériennes, plus précisément la crainte d'avoir des rapports avec les prostituées.

Terminologie